

# SWARM

SPITFIRE MANDOLIN SWARM  
USER MANUAL

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# CONGRATULATIONS

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Thank you for purchasing Spitfire Mandolin Swarm. 9Eighteen of the finest guitarists in one room. The perfect blend of mandolins, charangos and ukuleles, placed in pairs between ribbon microphones around the hall at Air Studios, to create a swarm of beauty.

## Quick Specs

- No. samples 14,760
- Uncompressed WAV 28.5GB
- Disk space required 18.9GB
- Disk space required during install 37.8GB
  
- Kontakt Full Required
- New intuitive GUI with inline help
- Many microphones (CTA + A, T2, G)

## Table Of Contents

CONGRATULATIONS	2
WELCOME	2
DOWNLOADING & INSTALLING	3
FOLDER STRUCTURE	5
A QUICK LOOK	6
THE GENERAL OVERVIEW	7
THE EXPERT VIEW	8
THE OSTINATUM	12
APPENDIX A - RECOMMENDED TECH SPECS	14
APPENDIX B - KONTAKT vs. KONTAKT PLAYER	14
APPENDIX C1 - ARTICULATION LIST	15
APPENDIX D - MIC & MIX ACRONYMS	16
APPENDIX E - UACC	17
APPENDIX F - FAQs & TROUBLESHOOTING	18

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# WELCOME

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## BEHIND THE SAMPLES

Christian was commissioned to write for a film in September 2014, operatic in its expanse, with acres of space. Always a fan of the work of Terrence Malick, the aim was to create something to emulate arcing fields of barley and teardrops of rain; sounds that would mirror these chaotic patterns of natural beauty. After much testing, we took a “Swarm” of players, 18 in total, to Air Studios, to play a specially selected blend of instruments — the perfect mix of mandolins, ukeleles and charangos. The results were sublime, from a beautiful patina of plucked notes, to jets of long notes, created by a multitude of chaotic unmeasured tremolos played by players all over the room.

Mandolin Swarm was recorded by Jake Jackson at Lyndhurst Hall, Air Studios, through an array of vintage microphones via Neve “Montserrat” pre-amps, to a beautifully serviced Studer 2” tape machine and then into digital at 96k via Prism AD converters. We elevated a second tree and third ambient and outrigger to create the perfect symmetry between every player. The players were placed in three waves: seven huddled around the first tree, six around the second tree, and six in each gallery quadrant. Whilst the upper dynamic layers provided shocking drama and definition, it was the quieter layers that offered the most intrigue.

## A SWARM OF BEAUTY

The library is presented with six microphone positions and three stereo mixes which you mix and blend to fit the application you’re working on, but also automate for dramatic shifts in focus and depth. They’re also fully output assignable for surround and 5.1 use. The definitive range is designed to fit with Spitfire’s entire orchestral range.

One of the key areas of interest with this instrument type is the tremolandi. You have control over both the dynamic level of these extraordinarily long articulations, and the speed — from a gentle trickle, to a haze of notes. We also have two sets of measured tremos that, depending on the application, can sync to your host tempo with varying levels of tightness, as well as a hair-raising set of slowly played chords.

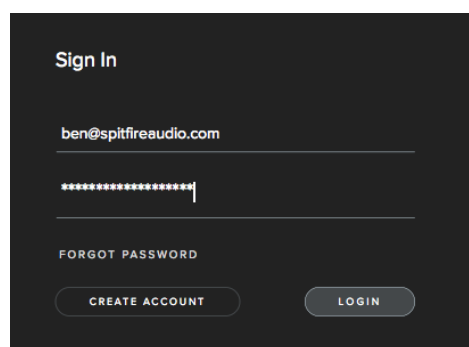
When combined with Blake’s scripting and our talented programmers, producers and composers, Swarm gives you instant inspiration of a very special kind.

# DOWNLOADING & INSTALLING

Thank you for buying Mandolin Swarm. If you are a total newbie to this kind of thing you can get up to speed here: <http://www.spitfireaudio.com/info/basics/>

First though, grab the 'Spitfire Audio App' from this link: this app will enable you to download the library <http://www.spitfireaudio.com/info/library-manager/>

## THE SPITFIRE AUDIO APP

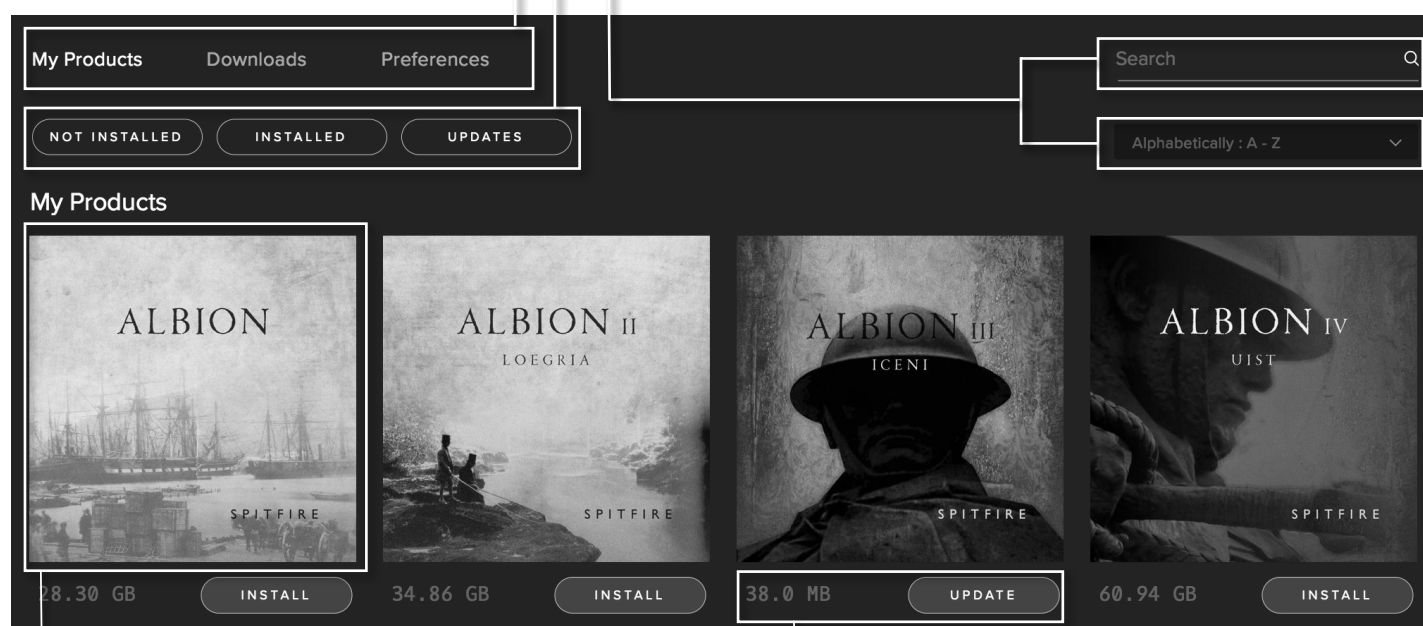


When you launch the app you will be prompted to login using the same details you use at our site. Then you'll see the page pictured below:

**TABS** the default tab is **My Products**, which shows all of the libraries on your Spitfire Account. **Downloads** will show currently downloading products and **Preferences** allows you to set default locations and behaviours as described on the next page.

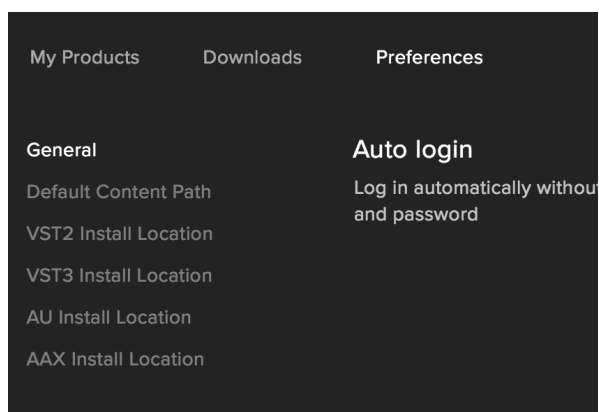
**FILTERS** clicking these filters will quickly display products you've yet to install, those already installed, and any available updates. Clicking again will remove the filter.

**SEARCH** and **SORT** allow you to quickly navigate through your collection and arrange your collection either by size or name.



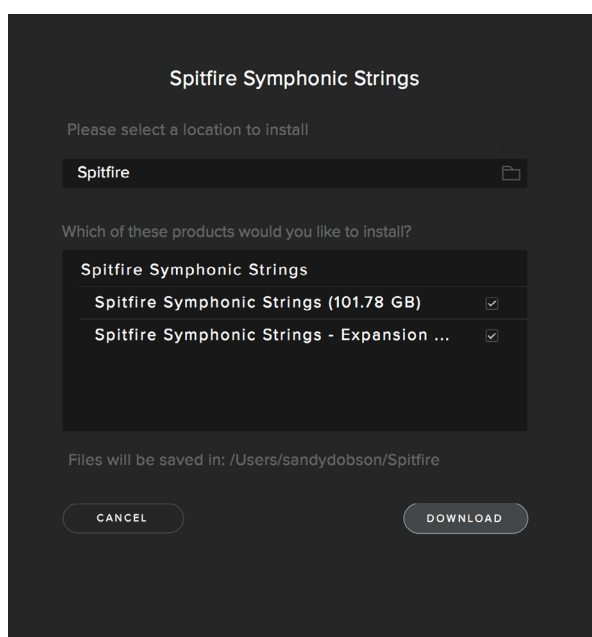
**LIBRARY** All libraries and plugins in your collection will appear with their artwork on the **My Products** tab. Clicking this artwork will open the product page. This is a great place to find information such as system requirements and instructions as well as where to find **Reset** and **Repair** options.

**INSTALL/UPDATE** buttons allow you to quickly start a download directly from the **My Products** tab, instead of clicking through to the **Library**. Next to the button the size of the download is shown, you will need twice as much available space to allow the download to unzip correctly.



If this is your first time using the Spitfire Audio App for a download you may wish to first navigate to the Preferences tab and make sure that the **Default Content** location is set to the location where you wish to download your libraries and that the **VST2 install location** is set to the folder where your DAW expects to find VST files.

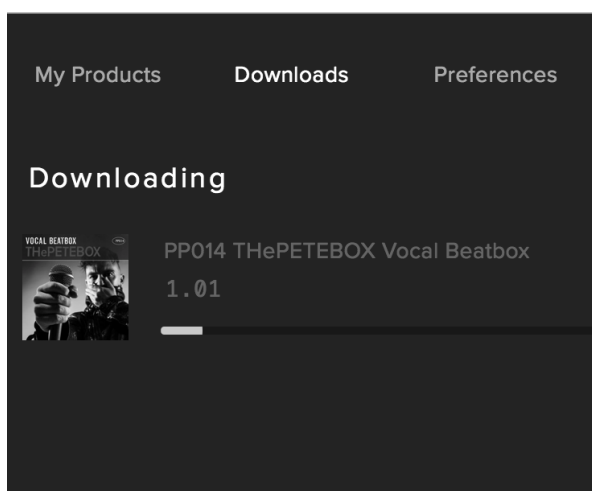
Here you can also enable **Auto Login** to save time in future.



Once you are happy with your preferences, simply click the **Install** button, either directly on **My Products** tab, or by clicking on the library image you wish to install and then clicking the **install** button on the page that appears.

Clicking either of these will prompt you for a location, the **default content** location in your preferences will be suggested but you can select any suitable location.

Once you are happy with the location click **Download**.



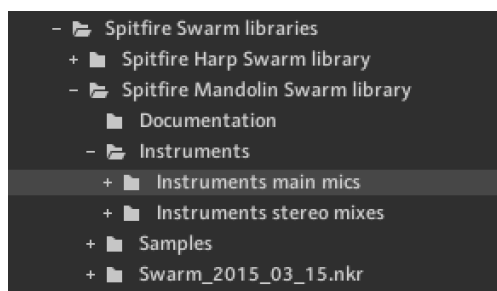
After clicking download you will be directed to the Downloads tab where you can watch the progress if you like. You can of course leave the Downloads tab and start other downloads but at this point you should leave the Spitfire App open until the download completes.

As this is a Kontakt full library, once it is downloaded you can load it by following the steps on the next page.

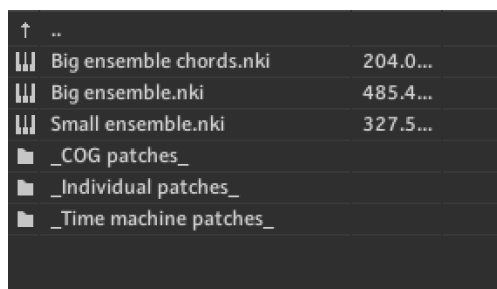
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# FOLDER STRUCTURE

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As Mandolin Swarm is not a Kontakt Player library, you can locate it using the Files tab in Kontakt as shown on the left, simply click through to the location where you decided to download the library and look for “Spitfire Mandolin Swarm Library”



Inside the instruments folder of “Spitfire Mandolin Swarm Library” you will find subfolders for main mics and stereo mixes. There are two duplicate instrument folders designed for those who wish to make their own mixes using the mic selections and perspectives provided with this library and those of you who enjoy the convenience, cpu efficient and brilliant mixes created by our chief engineer Jake Jackson.

Inside both of these there are the following advanced folders

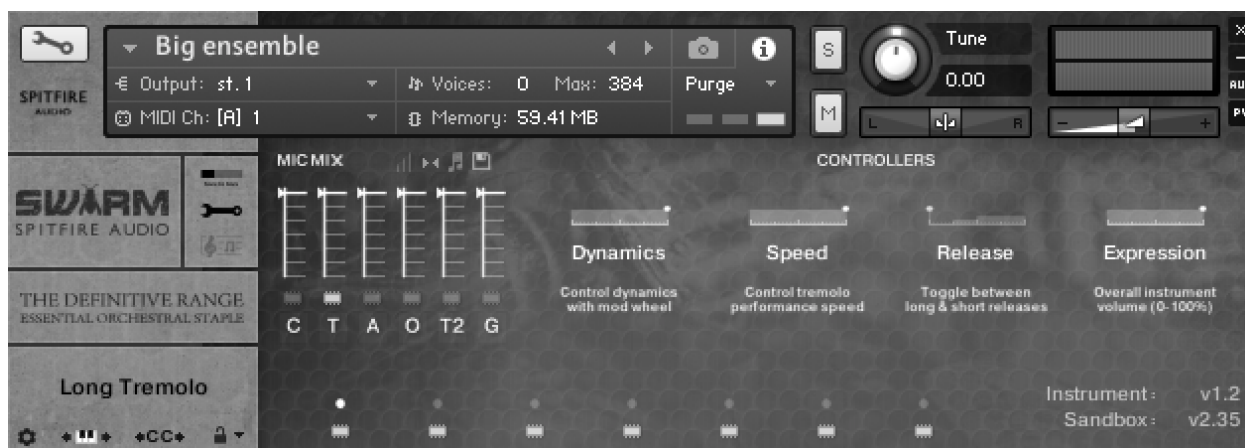
**Cog Patches** - these have additional scripts that allow you to use the cog function to customise the mapping of the samples across different swarm instruments.

**Individual Patches** - each separate articulation in its own patch.

**Time Machine** - These patches contain all of the short articulations fully loaded into RAM so that you are able to vary the length of the short notes via CC.

# A QUICK LOOK

## SWITCHING VIEWS



All of the libraries that we track at Air Studios are recorded via priceless ribbon and valve mics via Neve Montserrat pre-amps, the largest 88R Neve console in the world and onto pristine 2" tape before being converted with the top-of-their-class Prism AD converters at 96k.

When you first load up a Spitfire Mandolin Swarm preset you'll be greeted with this GUI. This is one of 2 pages that you can switch between using the panel switcher.

### ASSIGNING CONTROLS IN KONTAKT

All GUI controls can be assigned a unique controller number so you can automate or adjust via an external controller (vital when playing in virtual Orchestral parts). To un-assign, assign or just to see what CC number is assigned to any control RIGHT or CTRL CLICK.

You can then alter the controller parameters in the "Automation pane" if for example you want your mod wheel to go all the way from top to bottom but the control to have restricted bandwidth change from the default of 0-127 to 20-100. Or if you want the controller to make the GUI control in the reverse direction change from the default of 0-127 to 127-0.

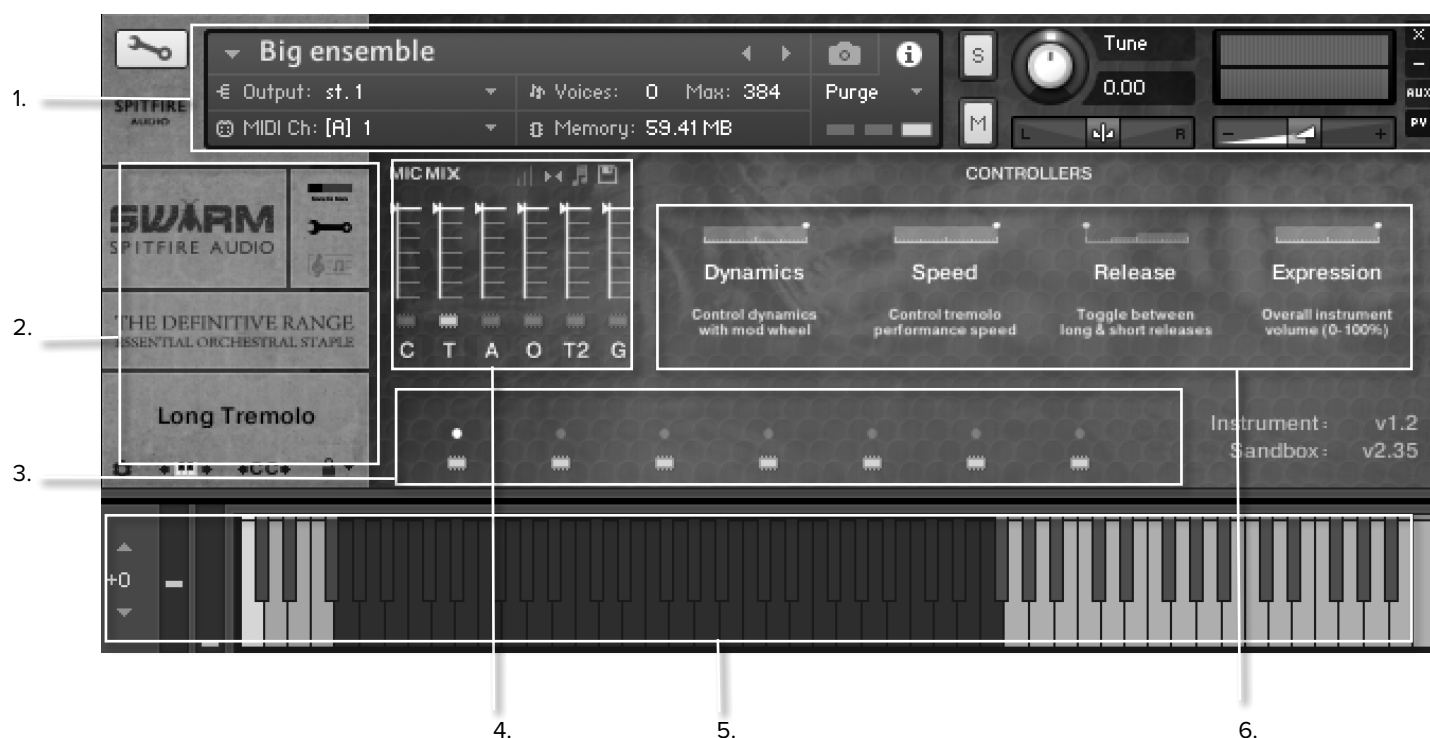


Click on these to switch views or pages:

1. General Overview (the view shown above)
2. Expert View
3. Ostinatum.

All three pages are discussed in more detail on the following pages..

# THE GENERAL OVERVIEW



## 1. KONTAKT HEADER

This area at the top of each instrument is where to set your audio and MIDI routing as well as see whether the patch is loaded, loading or purged. On the right you can solo, mute, pan, tune and adjust volume.

## 2. SIDEBAR

The sidebar displays the name of the currently selected articulation and is also where you change views (as described on page 8).

## 3. ARTICULATION SWITCHER

These musical note icons are the available articulations in your patch, you can change articulations by clicking on the icons and select multiples by shift clicking. These icons also correspond to the red keys in the Kontakt keyboard (see point 5.)

## 4. EASY MIX

The orchestra was recorded with several different mic perspectives. Move this slider up or down to change the distance from the players. Note that moving this fader will load and unload samples so it is best to “set and forget”

## 5. KONTAKT KEYBOARD

With the Kontakt keyboard displayed you should see a red range of keys and a blue range. The red range is your Keyswitch range for selecting articulations, holding more than one red key will select multiple articulations. The blue range is the playable range of the selected articulation.

## 6. CONTROLLERS

The following controls are included in this library to allow you to control and automate various parameters:

**Dynamics** - probably the most important controller you have. This crossfades between the different dynamic layers recorded.

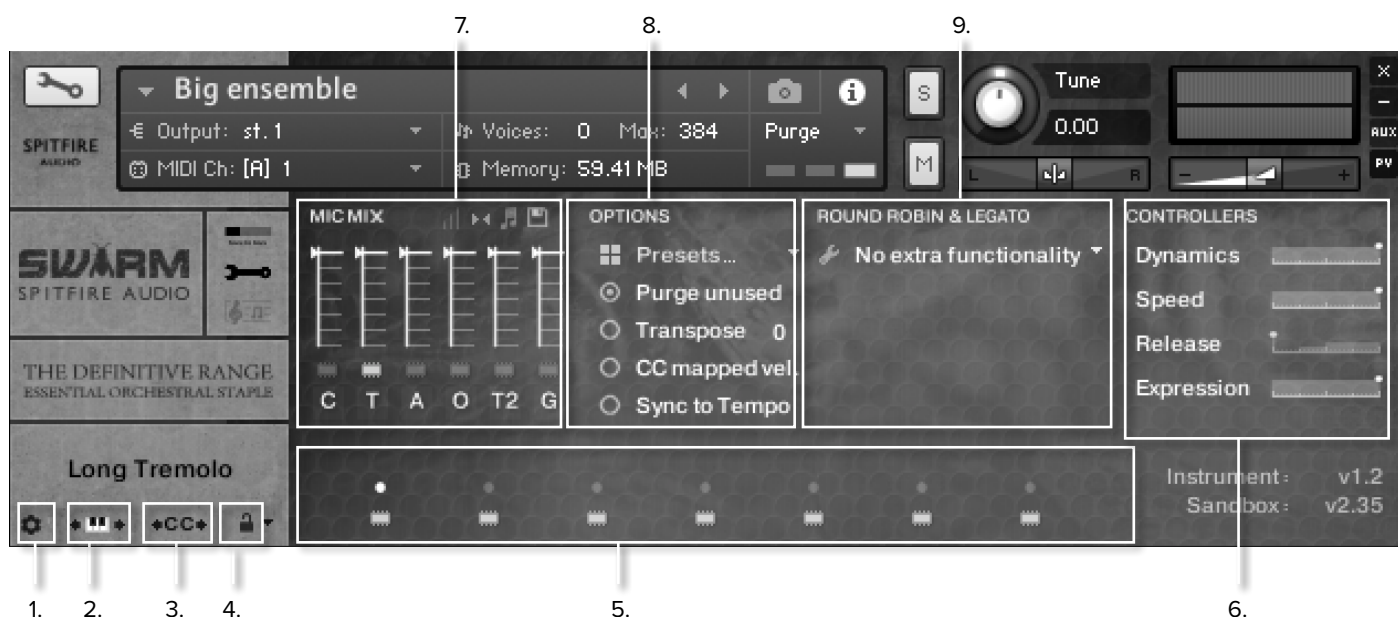
**Speed** - Controls the speed of the tremolandi.

**Release** - allows you to change the amounts of release trigger you and your listener hears.

**Expression** - instrument trim (CC11), so this adjusts the volume within the instrument volume (CC7) great when used in conjunction with expression.



# THE EXPERT VIEW



## 1. THE COG

Clicking this cog allows you to tweak (change) the last played round robin (RR). You will have the option to tweak the last note you played, save the tweaks you've made, load tweaks and clear all of the tweaks to return to the default configuration.

The options you will have for each RR are:

**SKIP THIS RR** - Will simply make it always jump along to the next round robin in the cycle.

**ADJUST TUNE/VOL** - Will adjust the tuning and or volume of the last played note.

**ADJUST RELEASE** - This will alter the level of the release trigger (which will affect the perceived decay of that note).

**SAMPLE START** - If it feels loose adjust to the right, tight adjust to the left (Note that this is only available in full "cog" patches).

**REMOVE ALL NOTE TWEAKS** - This removes all custom changes you have made with the Cog for this note..

## 2. KEYBOARD SHIMMIER

This allows you to move/transpose the default key switches (the red keys) simply click and drag left to move the range left and drag right to move the range right. Note that this also transposes the key switch used for UACC KS described on point 4.

## 3. CC FOR SWITCHING ARTICULATIONS

When using UACC (described in point 4. and appendix E.) the default is CC#32, right clicking this icon allows you to re-assign this value, just like re-assigning any of the controllers).

## 4. ARTICULATION LOCK

There are multiple ways to select articulations in our libraries, the simplest of these is to use the default key switches but by selecting different options from this menu you can use the others:

Unlocked Artic. - Is the standard setting, select articulations via the front panel or key switches.

Locked Artic' - This locks your articulation so it doesn't change at all.

Locked Keyswitch - This locks your articulation via keyswitch but you're free to switch via the front panel.

Locked to UACC - This is a standard developed by Spitfire and detailed in appendix E. The default controller channel is #32 but this can be changed as described in point 3.

Locked to UACC KS - The functionality of UACC with the flexibility of a keyswitch. When activated, a single keyswitch is available. Pressing this key at varying velocities (corresponding to the UACC standard) changes articulation. Unlike standard UACC this allows for layering of articulations.

Points 5-9. continue on Pages 9-11

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## 5. ARTICULATION SWITCHER

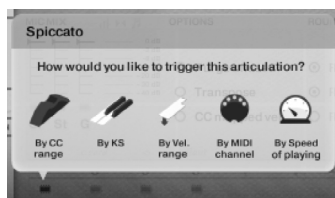
This works in the same way as the Articulation Switcher described on page 9 (point 3.) but with some additional features.

### Loading/Unloading articulations

First you will notice there is now a “microchip” icon under each articulation, clicking this will load or unload the articulation from memory. Unloading unused articulations can help with memory load but bear in mind that an unloaded articulation will produce no sound. Also when loading an articulation make sure it is loaded (in the Kontakt Header) before playing back.

### Custom triggers for switching articulations

In the expert view, Command+Clicking on an articulation (Control+Click on Windows) will pop up a menu with some options for customising how articulations are triggered or switched:



**By CC Range** - This will allow you to use a single MIDI CC message to switch between articulations. Set each articulation to a specific range and use a MIDI controller fader or indeed button with a single CC value assigned to select your desired articulation. Our default setting CC used is CC#32 as per our UACC protocol.

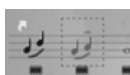
**By KS** - This allows you to create your own custom Key Switch for the articulation, please note that this is not as fully featured as the default KS range and does not allow for layering. This is only advisable if you have a specific KS layout you prefer.

**By Velocity Range** - This is great for designing intelligent staccato patches that say become staccatissimo when you hit the keyboard hard.

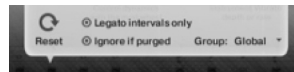
**By MIDI Channel** - This option turns your single instance into a multi timbral instrument. MIDI channel lets the instrument change articulation based on the incoming MIDI channel. To use, place the instrument MIDI Channel to ‘Omni’ mode in the Kontakt Header. The single instance can now be configured to play based on the incoming MIDI channel. For example. Set one articulation to channel 1, the next to channel 2, and then to channel 3 and so on.

**By Speed Of Playing** - This function allows you to switch articulations based on the playing speed of your performance. When selected, it provides options to specify a triggering time-range in milliseconds.

Once a custom trigger is set you will see a small white arrow above the articulation to indicate this, Alt+Clicking on this will toggle the trigger on or off:



Each of the different trigger options has a trigger panel which allows you to specify if you want this trigger to apply only to legato intervals:



You will also see an option to specify a group for the triggers, this means that a trigger will only activate when another articulation in the same group is already activated. An example of this might be velocity triggers for shorts only, or playing speed for legato articulations only.

### A quick tip

Whilst there are many ways to switch between articulations, many pros still prefer to have a different articulation in a single instance per track on their DAW. This enables them to assign different reverb levels and bake helpful stems that can be used in conjunction with live instruments (to work like this it's best to load up articles from the individual articulations sub folder).

## 6. CONTROLLERS

These are essentially the same as the controllers in the general overview but all controllers for the instrument are present. The following controls are included in this library to allow you to control and automate various parameters:

**Dynamics** - probably the most important controller you have. This crossfades between the different dynamic layers recorded.

**Speed** - Controls the speed of the tremolandi.

**Release** - allows you to change the amounts of release trigger you and your listener hears.

**Expression** - instrument trim (CC11), so this adjusts the volume within the instrument volume (CC7) great when used in conjunction with expression.

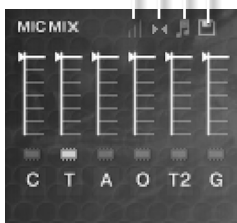
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## 7. MIC MIX

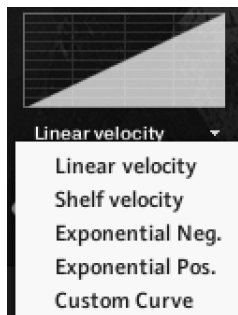
This is a more advanced mixer than the easy mix in the General Overview, with individual faders for each mic. Like the Articulation Switcher the chips beneath the faders load and unload different microphones and the faders above to tweak the balance of them. Turning a fader all the way down will also unload the mics and turning the fader back up will reload.

Right clicking the faders allows you to assign CC controllers so you can mix these live for shifts in the spacial nature of the samples. Click on the mic letters to assign a different output for each mic. On the top right of the mixer controller section are some extra mixing options:

a. b. c. d.

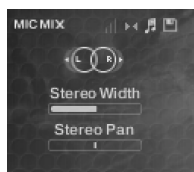


### a. VELOCITY RESPONSE CURVE



Pick from 4 different velocity curves to suit your controller.

### b. STEREO IMAGE CONTROLS



The mics are a stereo mix and this menu allows you to refine how the stereo image is handled. All our musicians are recorded in situ, i.e. where they would be seated on a standard scoring session, giving you a fantastic spectral spread when putting all the elements together. This panning tool helps you to manage and tweak this to your own tastes/ needs.

**STEREO WIDTH** - Allows you to control how far the stereo image reaches. All the way to the right would be like having your two pan pots panned hard. All the way to the left would be like having both pots centre,

**STEREO PAN** - Then allows you to control where in the pan field the centre of this image is placed.

### c. MIC MIX TO ARTICULATION LINKER

The small notation symbol locks the microphone mix or tweak you've made to the articulation selected. This means if you want to boost any perceived inconsistencies in volume between say pizzicato and col legno you can. Or indeed if you want to roll off some of the hall ambience for a short versus the long articulations this is how to fine tune.

### d. MIXER PRESETS

Reset mix settings  
Copy mix settings  
Paste mix settings  
Load mix preset  
Save mix preset

This menu is a way to transfer mixer settings between patches, or save and load presets to or from disk.

### AUTOMATING MIXER FADERS

Each mixer fader has a dedicated #CC. To change this to suit your MIDI controller or surface, simply RIGHT or CTRL click on the fader itself to "learn" the new controller.

### ROUTING MIC MIXES

To route each mic mixer channel to unique Kontakt channels simply click on the mic letter. Great for putting your ambient mics in the surround for example. Also good for track-laying individual mics for your engineer to control in your final mix sessions.

## 8. OPTIONS

**PRESETS** - These are memory presets which will load and unload both mics and articulations, this can be useful if you are concerned about memory load - on a travel rig for example.

**PURGE UNUSED** - This control keeps unloading any samples you are not using to keep your memory usage as low as possible.

**TRANPOSE** - Toggle this on and adjust the number to the right to transpose your instrument. Note this is not the same as tuning, the instrument will actually offset the samples to the selected pitch.

**CC MAPPED VEL(OCITY)** - Click this to control note velocity with the Dynamics slider. If you have re-assigned the dynamics slider, that same CC will control velocity now.

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## 9.ROUND ROBINS & LEGATO

**NO EXTRA FUNCTIONALITY(NEIGHBOURING ZONES)-** This is the menu for RR behaviour. Next to this lies a drop-down menu with some useful functions:

- **“No extra Functionality”** - Is the standard default where round robins are used as they were intended.
- **“Neighbouring Zones”** - pulls from neighbouring zones, so for an ‘8RR’ instrument, you effectively cycle through up to 24 different sounding notes when pressing a key. It’s still just playing the one RR at a time, though giving you more of them.
- **“2x Round Robin With Skip”** - plays two RR simultaneously, so you get a thicker sound, it’s the equivalent of plopping two notes on top of each other in your DAW (and it drops the overall volume ~6db so that the levels remain the same but it just sounds thicker). This plays the pairs and moves ahead by 2 RR. In this mode RR is effectively halved. E.g., if you press a note it would play RR1/RR2 then RR3/RR4 ,etc.
- **“Layer 2x Round Robins With No Skip”** - As above but this plays a pair but doesn’t move ahead by 2 so that RR isn’t halved. So if you press a note it would play RR1/RR2, then RR2/RR3, then RR3/RR4.

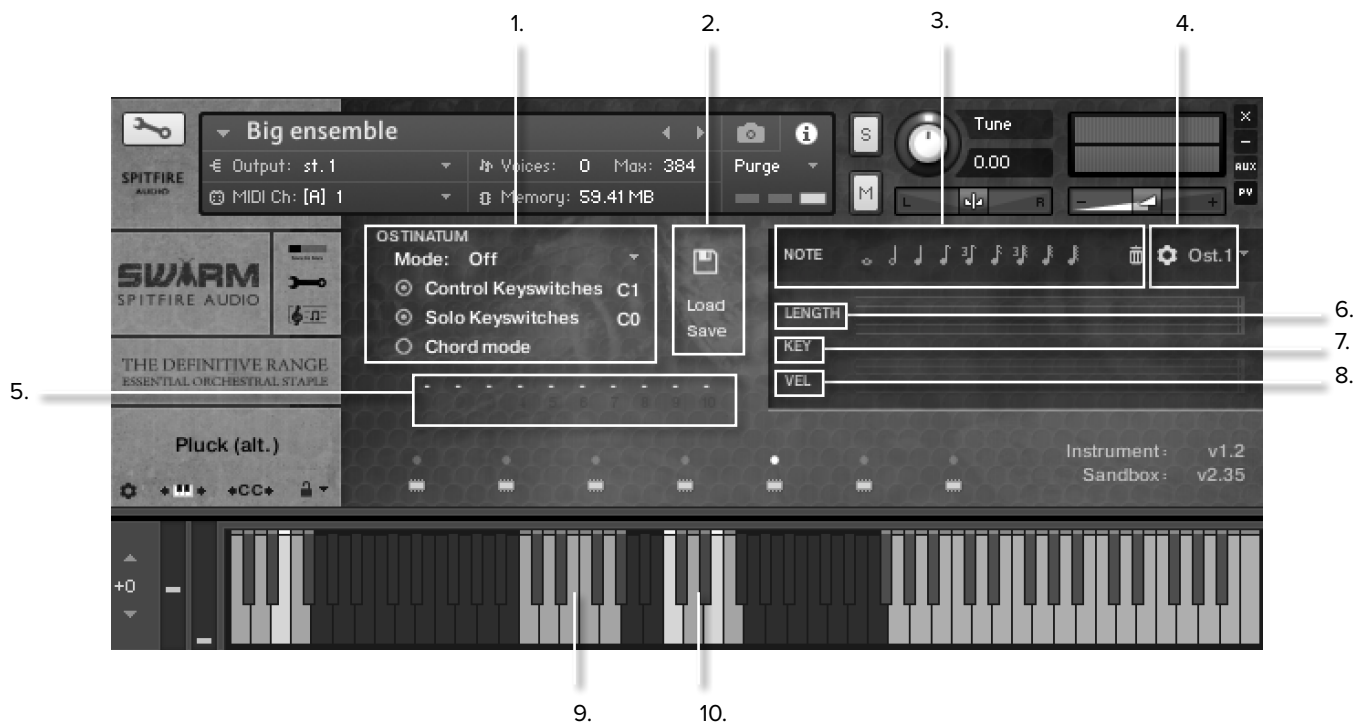
**RESET FROM F0** - This enables you to control the round robin cycle (so it sounds identical every time you play) toggle on & play the key selected (default F0) to reset.

**RESET ON TRANSPORT** - As above but resets every time you press play in the DAW.

**SHORT ARTICULATIONS RT** - This option allows you to toggle whether staccato/tenuto/marcato notes have a release trigger that plays on release. This lets you tighten up staccatos or end marcatos/tenutos earlier than they were recorded.

# THE OSTINATUM

Designed to be used with short articulations, this ever evolving device can offer instant chaotic inspiration or be used to create scientifically designed rhythms, ostinati and arpeggiated sequences as well as shimmering tremolando effects.



## 1. OSTINATUM SETTINGS

This section has controls for selecting how the ostinatum handles incoming notes and for enabling and disabling keyswitches. The mode options are as follows:

**OFF** - The default position Ostinatum remains dormant.

**ORDER PRESSED** - This will number the notes in the order you pressed them.

**ASCENDING** - This will number the notes from lowest to highest.

**DESCENDING** - This will number the notes from highest to lowest.

The other options are as follows:

**CONTROL KEYSWITCHES** - Allows you to set up a section of the keyboard that controls the state of the ostinatum (point 10.)

**SOLO KEYSWITCHES** - Allows you to dedicate a section of the keyboard to keyswitches that solo each ostinatum pattern (point 9.)

**CHORD MODE** - This ignores any note order and simply plays everything polyphonically, great for measured trem style effects.

## 2. LOAD/SAVE PATTERN

These buttons allow you to save and load the currently selected pattern to disk.

## 3. NOTE INPUT

By clicking on the different note values will add note to the end of the pattern that is this long, for instance clicking a crotchet/quarter-note will add a note of this length to the pattern. Clicking the bin/trashcan icon will remove the most recently added note.

## 4. PATTERN SETTINGS

The “cog” icon reveals a drop down menu with the following options:

### Wrap around if less notes held (or don't)

If the notes in the current pattern are using Key values of 1-10 but there less than 10 notes held the values will wrap around to 1 again. For example, if the pattern contains Key values 1-6 and only 4 notes are held, then Key values 5 and 6 will trigger 1 and 2 respectively. With this disabled, the notes will be skipped instead of played.

### Mute this pattern (or don't)

This pattern will not play when muted, this is overridden by keyswitches in point 9.

### Ignore chord settings (or don't)

With chord mode enabled this pattern will behave as though it is disabled.

To the right of the cog is a drop down menu for selecting the currently displayed pattern.

## 5. KEY DISPLAY

This displays the currently held notes numbering 1-10 arranged from left to right, this display changes based on the Mode setting.

## 6. NOTE LENGTH DISPLAY

This area displays all of the notes in the currently selected pattern.

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## 7. KEY

This value will affect which note is played for this step in the sequence, the number corresponds to the value displayed in the Key Display (point 5.) Click and drag up or down on the numbers to adjust.

## 8. VELOCITY/NOTE OFFSET

By default the velocity of each note is based on the note played, this allows you to offset this velocity for a particular step, either making it harder or softer. Clicking the word Vel will change this to pitch offset instead. Click and drag up or down on the bars to adjust.

## 9. SOLO KEYSWITCHES

The first keyswitch turns all patterns on, the following keyswitches solo each individual pattern. These keyswitches override the mute settings in point 4.

## 10. CONTROL KEYSWITCHES

These keyswitches arranged chromatically allow you to change the mode of the Ostinatum, including switching it off entirely.

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## GETTING STARTED WITH THE OSTINATUM

The easiest way to get a feel for how the Ostinatum works is to create a few patterns and experiment with the different settings. Try the following steps to get up and running:

1. Select a short articulation and navigate to the Ostinatum page
2. Change the mode to Ascending (point 1.)
3. Enter a few note values with the Note input (point 3.)
4. Change a few of the Key and Velocity values (points 7. and 8.)
5. Hold a few different chords and hear the results.

Next try the following:

6. Change to a second pattern with the drop down menu (point 4)
7. Repeat steps 3-5 for this new pattern and continue adding patterns

You can now try changing the Mode to see how this affects your patterns, if you're happy with these settings consider saving the various patterns for use in future!

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## APPENDIX A - RECOMMENDED TECH SPECS

---

IF YOU PLAN TO USE THIS LIBRARY WITH THE FULL VERSION OF KONTAKT PLEASE MAKE SURE YOU HAVE THE LATEST VERSION OF KONTAKT 5 INSTALLED.

### RECOMMENDED SPEC:

The better your computer, the better the performance of any Spitfire module. But not to worry if you're not spec'd up to the hilt. All programs are provided with a set of parameters that enable you to dial back the CPU demands of any given patch. But moving forward, we're confident this module will keep your computer busy for many years to come! We recommend a combination of high processor speeds, a good chunk of memory and a devoted SSD eSata, USB3, or Thunderbolt drive. The more memory you have, the less demand placed on your drive, and having a totally devoted drive gives you the chance to load less into memory and reduce load times. The higher the speed of your CPU, the more capable your computer will be to deal with some of the amazing, but complicated scripts we've written.

### PCs:

We recommend Windows 7 or later (latest Service Pack, 32/64 Bit), Intel i5, i7 or AMD R5 or R7, 16 GB RAM (8 GB minimum).

### MACs:

We recommend Mac OS X 10.10 or later (latest update), Intel i5 or i7, 16 GB RAM (8 GB minimum).

### DRIVES:

USB3, Thunderbolt, or eSata SSDs. Ask your dealer for drives that are suitable for "AV use". If you can afford an SSD drive, this will massively increase the power of your system. Instead of 7-9ms seek time, the usual seek time is <0.1ms. These are fast enough to run a patch 'Purged' of all its samples, and they can load on the fly as you play the notes. You can also reduce your sampler's "pre-load" buffer tenfold meaning you'll be able to load enormous orchestral palettes into a single machine.

### HOST:

The Kontakt 5 platform should work comfortably on most commonly found platforms and DAWs. As always make sure you're as up-to-date as you can afford! If your main DAW is not a newish machine, or has a limited spec, and you're planning on building or adding Spitfire to an already large orchestral palette, you could consider running your library independently of your DAW, either on your host computer (e.g. via Re-Wire) or on a slave device (e.g. via Midi or MOL). This will assist your loading times, and will allow your DAW to do what it does best, sort out all your note ons and note offs!

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## APPENDIX B - KONTAKT vs. KONTAKT PLAYER

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Kontakt Player is a free version of the Kontakt sample playback engine available to download:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/downloads/>

It works with libraries that the developer has paid a license fee for. Essentially, you've bought this playback engine along with your library.

The Kontakt player gives you full access to all the sounds and all the editable parameters on the front panel. Also, unlike non-Player libraries, these libraries will also have a banner that appears on the Kontakt Libraries pane.

If you want to go deeper into editing you'll need a full version. As you will already own the free Kontakt player and have bought one of our 'player' libraries you will be eligible for a discount upgrade to Kontakt via the NI website. See here for more details:

<https://www.native-instruments.com/en/products/komplete/samplers/kontakt-5/pricing/crossgrade-offer/>

If the library you want to use is NOT a 'Player' library then you need to buy the full retail version of Kontakt.

Then you can also load 'non-Player' libraries like some of our other ranges, Spitfire LABS, Harp, Piano, Harpsichord, Solo Strings etc. Please note that non-Player library instruments will not appear on the Kontakt libraries pane and so can't be added as a library as Player libraries need to be. Instead, these libraries will simply need to be loaded via the Kontakt files browser or alternatively you can add the library as a favourite to the Kontakt Quick Load window.

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# APPENDIX C1 - ARTICULATION LIST

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## Instruments main mics:

- Big ensemble chords
- Big ensemble
- Small ensemble

## \_COG patches\_:

- Big ensemble chords
- Big ensemble
- Small ensemble

## \_Individual patches\_:

- Big ensemble - Long Chords
- Big ensemble - Long Measured Tremolo 90bpm
- Big ensemble - Long Measured Tremolo 120bpm
- Big ensemble - Long Tremolo
- Big ensemble - Short FX Behind Bridge
- Big ensemble - Short Pluck Alt
- Big ensemble - Short Pluck Muted
- Big ensemble - Short Pluck
- Small ensemble - Long Tremolo
- Small ensemble - Short Pluck Muted
- Small ensemble - Short Pluck

## Time machine patches\_:

- Big ensemble
- Small ensemble

## Instruments stereo mixes:

- Big ensemble chords
- Big ensemble
- Small ensemble

## \_COG patches\_:

- Big ensemble chords
- Big ensemble
- Small ensemble

## \_Individual patches\_:

- Big ensemble - Long Chords
- Big ensemble - Long Measured Tremolo 90bpm
- Big ensemble - Long Measured Tremolo 120bpm
- Big ensemble - Long Tremolo
- Big ensemble - Short FX Behind Bridge
- Big ensemble - Short Pluck Alt
- Big ensemble - Short Pluck Muted
- Big ensemble - Short Pluck
- Small ensemble - Long Tremolo
- Small ensemble - Short Pluck Muted
- Small ensemble - Short Pluck

## Time machine patches\_:

- Big ensemble
- Small ensemble



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# APPENDIX D - MIC & MIX ACRONYMS

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C - Close mics, a selection of valve mics placed for optimum focus close to the instruments. This mic control is great to add in for added definition and at times a bit of “rounding of sound”, in isolation it can be a way of achieving a more intimate or pop-music style sound.

T - Tree. This refers to the “Decca” tree of three mics placed above the conductors podium. In the case of Sable; 3 priceless vintage Neumann M50s. These are placed to give the ultimate sound of the band, the hall and are the default mic position that loads in with each patch.

A - Ambient. A set of condenser mics placed high up in the gallery away from the band. This mic position gives a massive amount of stereo spread and room sound over the band. Great mixed in with the other mics but also ideal fed to your Ls & Rs speaker sends for true surround information.

O - Outriggers, a set of vintage mics placed wide apart to the left and right of the tree. These give a similar balance of room and band but with a broader stereo spread. The effect of this mic is somewhere between the tree and ambient mics.

T2 - Tree 2, As the band is spread so widely we decided to put a second tree out at the rear of the hall. If you really want to capture the band in full dialling this in is well advised.

G - Gallery mics, three mics at the very farthest point from the band way up in the gallery. A true representation of Air-Studios’ amazing ambience.

## JAKE JACKSON MIXES

3 extraordinary mixes from our chief engineer to save your system resources

B - Broad, a cinematic/ symphonic mix that allow the hall to really speak out.

M - Medium, a more intimate but still very classic version of the mix above.


F - Fine, a much more detailed and immediate sound with less hall, great for pop!

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# APPENDIX E - UACC

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With the development of Spitfire's BML Sable it was proving quite difficult to standardise how to access the ever-growing number of articulations contained within instruments and libraries. While they worked adequately, Keyswitches and CC32 were inconsistent between sections and instruments and it could prove a pain to do something as simple as substituting a Viola for a Violin section.

To address the problem, Spitfire developed UACC, a specification that hopes to standardise articulation control between instruments and libraries. UACC is turned on via the Keyswitch locking option (  ) and utilises the same CC as above (and can be customised identically). When UACC is activated you can change articulation by setting CC32 to specific values that correlative with different articulations. Here's the latest (v2) spec:


Long (sustain)	34	Detache	80	Synced - 120bpm (trem/trill)
1 Generic	35	Higher	81	Synced - 150bpm (trem/trill)
2 Alternative	36	Lower	82	Synced - 180bpm (trem/trill)
3 Octave				
4 Octave muted	Short		Phrases & Dynamics	
5 Small (1/2)	40	Generic	90	FX 1
6 Small muted	41	Alternative	91	FX 2
7 Muted	42	Very short (spicc)	92	FX 3
8 Soft (flaut/hollow)	43	Very short (soft)	93	FX 4
9 Hard (cuivre/overb)	44	Leisurely (stacc)	94	FX 5
10 Harmonic	45	Octave	95	FX 6
11 Tremolo/flutter	46	Octave muted	96	FX 7
12 Tremolo muted	47	Muted	97	FX 8
13 Tremolo soft/low	48	Soft (brush/feather)	98	FX 9
14 Tremolo hard/high	49	Hard (dig)	99	FX 10
15 Tremolo muted low	50	Tenuto	100	Up (rips/runs)
16 Vibrato (molto vib)	51	Tenuto Soft	101	Downs (falls/runs)
17 Higher (sultasto/bells up)	52	Marcato	102	Crescendo
18 Lower (sul pont)	53	Marcato Soft	103	Decrescendo
19 Lower muted	54	Marcato Hard	104	Arc
	55	Marcato Long	105	Slides
Legato	56	Plucked (pizz)		
20 Generic	57	Plucked hard (bartok)	Various	
21 Alternative	58	Struck (col leg)	110	Disco up (rips)
22 Octave	59	Higher	111	Disco down (falls)
23 Octave muted	60	Lower	112	Single string (Sul C/G/etc.)
24 Small	61	Harmonic		
25 Small muted				
26 Muted	Decorative			
27 Soft	70	Trill (minor 2nd)		
28 Hard	71	Trill (major 2nd)		
29 Harmonic	72	Trill (minor 3rd)		
30 Tremolo	73	Trill (major 3rd)		
31 Slow (port/gliss)	74	Trill (perfect 4th)		
32 Fast	75	Multitongue		
33 Run	76	Multitongue muted		

For example, turning on UACC and changing CC32 to 26 will change the current articulation to Legato - Muted. Setting it to 52 would change to Short - Marcato. You can set these manually in your DAW but it's much easier to utilise DAW functionality such as VST Note Expression, or a dedicate tablet app such as Lemur, TouchOSC, LiveControl, etc.

The advantages of UACC are that it's consistent between all supported libraries (i.e.. setting CC32 to 52 will change to Marcato regardless of the library or patch) and easily configurable on tablet apps such as Lemur. It remains consistent between updates (any product using v2 will have the articulations mapped to the above spec). It also takes up no space on the keyboard.

The disadvantages are that it's difficult to control for live playing (unless using a tablet) and it does not support articulation layering.

## UACC KEYSWITCH

UACC keyswitching is a new feature in Spitfire products and updates. It is a mixture of keyswitching and UACC to provide the advantages of both methods. When UACC Keyswitch is activated via the lock panel menu (  ) a single keyswitch is available. Using the UACC spec outlined above, this keyswitches velocity is used to switch articulation.

For example pressing the keyswitch at velocity 70 would switch to the Trill (minor 2nd) articulation while pressing at velocity 56 would switch to Short Pizzicato. As with UACC, you can manually input these velocity values but it's easier to use your DAW or tablet app's functionality.

The main advantage of UACC KS over UACC is that you can layer articulations by overlaying the keyswitch notes on the piano roll.

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# APPENDIX F - FAQs & TROUBLESHOOTING

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## Q: WHAT IS THE DIFFERENCE BETWEEN KONTAKT AND KONTAKT PLAYER?

See appendix B

## Q: HOW CAN I REDOWNLOAD A PRODUCT?

With the continuous improvements to our Spitfire App, we have incorporated the ability to reset your own downloads, be it the entire library or the most recent update! This can easily be done via your Spitfire App. To reset both your entire library download or the latest update; Open up the Spitfire App and log in with your account email and password.

- Select the download you wish to re-download
- In the cog menu choose Reset Download > Entire Download/Latest Update

- This will reset your whole download/your latest update

You can repeat this process for any of the libraries you own. Note that there is a limit to how many times you can reset your downloads in a certain time frame. If you do exceed your reset limit please get in touch.

## Q: DIFFICULTIES IN DOWNLOADING / INSTALLING

Customers may find that they have some difficulties in the downloading process. If you find that you are having some trouble, please check the list below for possible causes.

- The formatting of your drive, if it is FAT32 this will cause errors, because there is a maximum file size with this format of 4GB and our download files will exceed this limit. To solve this problem, reformat your drive to a more modern format, or use a different drive. We recommend NTFS on PC and Mac OS Extended (journalled) on Mac.

- Free space on your hard drive, please allow at least double the space for the respective library. This is because your library is downloaded compressed, then uncompressed into a separate location, then the original is deleted. So briefly during install, there are two copies of the library on disk. To solve this problem use a drive with more space (the size you'll need during install is listed on the website page of the product you bought).

Other issues;

- Spitfire App freezes in the "Extracting" stage for hours. This may be because our libraries are often very large files, and this is the stage where the compressed files are extracted and placed in their final locations on the hard drive. There could be hundreds of GB of content to unpack, so it really can take hours. If you're unsure whether it has crashed or is simply extracting files, visit the installation folder you chose when you started the install. If everything is working normally you'll see various files appearing in the folder (or one of its sub-folders).

- If you see a "Download interrupted" message, this may be caused by a change in IP, usually the case with people using a VPN, or people who for some reason started a download in one country and tried to resume it in another. In this case, please submit a support ticket and we can unblock you.

- If your download gets stuck and is continually cycling and not resuming, please get in touch with us, giving us as much detail as possible about your set up. It would be helpful if you can tell us: Your operating system, where you are downloading from (your country, and also whether you're at home or work), your ISP, and whether there are any proxy servers or firewalls between your computer and the internet.

## Q: I'VE LOST MY INSTRUMENT FILES

In some cases, instrument files may get lost when transferring libraries from one place to another, or if an update has gone wrong. If this happens, the best way forward is to re-download the library in question. This will ensure you will get all of the content you are missing.

## Q: WHAT IS YOUR REFUNDS / RETURNS POLICY?

If you have NOT completed the download / installation process, then we CAN refund/return your product, please contact support with your account email address and order number so we can handle this quickly. If you HAVE completed the installation process (even if you've not yet registered your serial number), please see our EULA in regards to why we do not accept refunds and returns. We can refund hard drive orders up until the point when the drive is dispatched from our office. This is usually 2-4 days after you order.

## Q: I'VE FORGOTTEN MY PASSWORD?

If you have forgotten your password, please see this link, and click 'Forgotten Password'. If at some point in the past you asked us to merge two or more accounts but have since forgotten, you MAY find that the forgotten password isn't working for the email address you asked us to merge FROM. In this case, please contact support with your name, and any email addresses you think we might know about, and we'll work out what has happened.

## Q: VEP - CONTROLS / GUI HAS DISAPPEARED!?

You need to 'connect' the instance of VEP to your sequencer, and send it some MIDI - then the controls will reappear. Unless the instance of VEP is 'booted up' by actually connecting it, Kontakt will not complete the setup of the instrument which includes drawing the GUI.

## Q: WHAT IS THE NCW COMPRESSED FORMAT?

This is Native Instrument's new lossless compressed sample format - we have managed to reduce the sample data pool by around 55% and this also shows a benefit in streaming for you, along with reduced hard disk space required.

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### **Q: I HAVE FAST INTERNET, WHY IS MY DOWNLOAD SLOW?**

We have no direct influence on your actual download speeds, our libraries are hosted on Cloudfront servers which are normally very quick but it may well be that at certain times of the day when traffic is particularly busy, your ISP may throttle your connection speeds. We would advise you to leave your download running overnight as speeds should ramp up at less busy times. Our Spitfire App downloader aims to use as much of the available bandwidth as possible to give you the quickest possible speeds, and may take several minutes to reach its peak.

### **Q: CAN I INSTALL ON MORE THAN ONE COMPUTER?**

With our products you have two licenses. This means that you are allowed to download and install on two computers you own, say your main rig and your mobile rig. The best way to get your library on both of your machines is to copy it from one to another via an external HDD. It saves you from having to re-download the whole library again!

### **Q: CAN I TRY BEFORE I BUY?**

No - it is not currently possible to demo our products. If you go to our Youtube Channel you'll see many many walkthroughs containing detailed info about all our products -- you can hear them being played in real time with no smoke and mirrors!

### **Q: MY LIBRARIES ARE NOT SHOWING UP IN MY SPITFIRE APP?**

A handful of customers may find that when they log into their Spitfire App, some of their previous purchased products do not show up in the 'Installed' section or in the 'Download Ready' section either. It may be that you have purchased these under another email address. Checking other possible email addresses for your previous purchases may help to find these missing products. If this is not the case, and these missing products were purchased a few years ago, please create a support ticket telling us your account email address, and any serial numbers you may have to go with these missing products. Our support team can also merge one or more accounts together if you'd like to consolidate all your purchases in one place. The more information, the quicker we can get you back up and running!

### **Q: HOW DO I UPDATE MY PRODUCTS?**

The main premise of downloading our products is that our Spitfire App downloads into the folder you choose, so it is always good to choose the folder above where you want the download to go. The best file path for our products is something very simple, a long file path will cause errors as there is a character limit on how far the Spitfire App can read. We advise a file path of something along the lines of: Samples Drive > Spitfire Audio - always point the downloader to the folder 'Spitfire Audio' (the folder above the library) for all downloads and updates. When it comes to downloading/updating - if you have a folder called 'Spitfire Audio' always point the Spitfire App to the folder Spitfire Audio - never go into this folder and choose the actual library in question.

### **Q: HOW DO I REDOWNLOAD THE LATEST UPDATE?**

With the continuous improvements to our Spitfire App, we have incorporated the ability to reset your own downloads. This can easily be done via your Spitfire App.

- Open up the Spitfire App and log in with your account email and password.

- Select the download you wish to re-download

- In the cog menu choose Reset Download > Latest Update

- This will reset your latest update

You can repeat this process for any other updates you wish. If you do not see the option to reset your download in your Spitfire App, we would advise downloading the latest version of the Spitfire App from [spitfireaudio.com/info/library-manager/](http://spitfireaudio.com/info/library-manager/).

### **Q: I'VE BEEN WAITING AGES FOR MY DOWNLOAD LINKS?**

We run all our orders through a fraud checking process. The automatic fraud check takes 20 minutes (but can take up to an hour during a very busy period, eg. Black Friday), but if your order gets caught at this stage, we run a manual order check, and this can delay the processing of your order for up to 24 hours (though this would be a rare and exceptional case).

You should however receive an order confirmation email IMMEDIATELY upon placing your order. This confirms that your order has successfully been logged in our system and that your payment was successfully taken. Please check your junk folders before contacting our support. The message will come from [do\\_not\\_reply@spitfireaudio.com](mailto:do_not_reply@spitfireaudio.com) if you'd like to add us to your whitelist.

### **Q: CAN I DOWNLOAD ON A PC, THEN TRANSFER TO A MAC OR VICE VERSA?**

All of our libraries are compatible on both PC and Mac computers (as they run inside Kontakt). You can download all of our libraries on either PC or Mac and they will work if you need to transfer them across to the other operating system. We advise to do this by copying the library you want to move across to an external HDD and then copying it to and then copying it to your other machine.

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### **Q: 'SAMPLES MISSING' ERROR MESSAGES**

In some cases, samples files may get lost when transferring libraries from one place to another, or if an update has gone wrong. You may also get this error in some cases if you installed library on a drive with just under the minimum necessary amount of space to install the library (remember that you need **DOUBLE** the size of the final library to install successfully - see above). If this happens, the best way forward is to re-download the library in question. That will ensure you will get all of the content you are missing. For more information on how to re-download a product, please see the beginning of this appendix.

### **Q: HOW TO BATCH RESAVE A LIBRARY?**

There are two main reasons to batch resave: First it speeds up the loading of patches and secondly, it can help you find missing samples and relink them to the patches so that you don't need to search every time you load a patch. Bear in mind that it can sometimes take a few attempts to batch resave, and if Kontakt crashes the first time you try, you could go into the instruments folder and batch resave a bit at a time -- go by sub folders for example, just to lessen the load on Kontakt.

### **Q: I WANT TO BUY A COLLECTION, BUT I ALREADY OWN ONE OR MORE OF THE PRODUCTS IN IT?**

Our cart will intelligently deduct the proportional cost of any products you already own from the total price when you get to the checkout.

### **Q: I'VE LOST MY SERIAL NUMBER FOR PRODUCT ACTIVATION**

Emails get misplaced and you might find that you are out of luck when you need to find a past serial number. The best place to find all of your serial numbers would be to log into your Native Instruments account [HERE](#), and traverse to the My Products, Serials, and Downloads section. Under there you will find all of your serial numbers, including your Spitfire Audio serial numbers. If you find that the serial number you are looking for is not there, please contact us with all of the relevant information.

### **Q: I THINK I HAVE FOUND A BUG**

In some cases we can't squash them all and bugs shamefully make their way through. If you think you have found a bug, please contact us with all the relevant information;

- A description of the bug you have found
- A screencast (video) of the bug happening, or an audio example
- The exact patch name (or patches) in question and also the library giving us as much detail as possible will help us get to the bottom of the issue.

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